```
EEEEEEEEEEEEEEEE   DDDDDDDDDD       TTTTTTTTTTTTTTT
EEEEEEEEEEEEEEEEE  DDDDDDDDDD       TTTTTTTTTTTTTTT
EEEEEEEEEEEEEEEEEE DDDDDDDDDD       TTTTTTTTTTTTTTT
EEE                DDD     DDD            TTT
EEE                DDD     DDD            TTT
EEE                DDD     DDD            TTT
EEE                DDD     DDD            TTT
EEE                DDD     DDD            TTT
EEEEEEEEEEEEE      DDD     DDD            TTT
EEEEEEEEEEEEE      DDD     DDD            TTT
EEEEEEEEEEEEE      DDD     DDD            TTT
EEE                DDD     DDD            TTT
EEE                DDD     DDD            TTT
EEE                DDD     DDD            TTT
EEE                DDD     DDD            TTT
EEE                DDD     DDD            TTT
EEEEEEEEEEEEEEEEE  DDDDDDDDDD             TTT
EEEEEEEEEEEEEEEEE  DDDDDDDDDD             TTT
EEEEEEEEEEEEEEEEE  DDDDDDDDDD             TTT
```

FILEID**WFSTRINS

```
WW        WW  FFFFFFFFFF  SSSSSSSS   TTTTTTTTTT  RRRRRRRR    IIIIII   NN      NN   SSSSSSSS
WW        WW  FFFFFFFFFF  SSSSSSSS   TTTTTTTTTT  RRRRRRRR    IIIIII   NN      NN   SSSSSSSS
WW        WW  FF          SS             TT      RR      RR    II     NN      NN   SS
WW        WW  FF          SS             TT      RR      RR    II     NN      NN   SS
WW        WW  FF          SS             TT      RR      RR    II     NNNN    NN   SS
WW        WW  FF          SS             TT      RR      RR    II     NNNN    NN   SS
WW        WW  FFFFFFFF    SSSSSS         TT      RRRRRRRR      II     NN  NN  NN   SSSSSS
WW        WW  FFFFFFFF    SSSSSS         TT      RRRRRRRR      II     NN  NN  NN   SSSSSS
WW   WW   WW  FF              SS         TT      RR  RR        II     NN    NNNN   SS
WWW  WWW  WW  FF              SS         TT      RR      RR    II     NN    NNNN   SS
WWW  WWW  WW  FF              SS         TT      RR      RR    II     NN      NN   SS
WW        WW  FF          SSSSSSSS       TT      RR      RR  IIIIII   NN      NN   SSSSSSSS
WW        WW  FF          SSSSSSSS       TT      RR      RR  IIIIII   NN      NN   SSSSSSSS

LL            IIIIII     SSSSSSSS
LL            IIIIII     SSSSSSSS
LL              II       SS
LL              II       SS
LL              II       SS
LL              II       SS
LL              II           SSSSSS
LL              II           SSSSSS
LL              II               SS
LL              II               SS
LL              II               SS
LL              II               SS
LLLLLLLLLL    IIIIII     SSSSSSSS
LLLLLLLLLL    IIIIII     SSSSSSSS
```

```
    1     0001   O  %TITLE 'EDT$WFSTRINS - start an INSERT operation'
    2     0002   O  MODULE EDT$WFSTRINS (                         ! Start an INSERT operation
    3     0003   O                 IDENT = 'V04-000'              ! File: WFSTRINS.BLI Edit: JBS1003
    4     0004   O                 ) =
    5     0005   1  BEGIN
    6     0006   1
    7     0007   1  !*******************************************************************************
    8     0008   1  !*                                                                             *
    9     0009   1  !*   COPYRIGHT (c) 1978, 1980, 1982, 1984 BY                                   *
   10     0010   1  !*   DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.                    *
   11     0011   1  !*   ALL RIGHTS RESERVED.                                                      *
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   16     0016   1  !*   COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY     *
   17     0017   1  !*   OTHER PERSON.  NO TITLE TO AND OWNERSHIP OF  THE  SOFTWARE IS  HEREBY     *
   18     0018   1  !*   TRANSFERRED.                                                              *
   19     0019   1  !*                                                                             *
   20     0020   1  !*   THE INFORMATION IN THIS SOFTWARE IS  SUBJECT TO CHANGE WITHOUT NOTICE     *
   21     0021   1  !*   AND  SHOULD  NOT  BE  CONSTRUED AS  A COMMITMENT BY DIGITAL EQUIPMENT     *
   22     0022   1  !*   CORPORATION.                                                              *
   23     0023   1  !*                                                                             *
   24     0024   1  !*   DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE  OR  RELIABILITY OF ITS     *
   25     0025   1  !*   SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.                   *
   26     0026   1  !*                                                                             *
   27     0027   1  !*                                                                             *
   28     0028   1  !*******************************************************************************
   29     0029   1  !
   30     0030   1
   31     0031   1  !++
   32     0032   1  ! FACILITY:     EDT -- The DEC Standard Editor
   33     0033   1  !
   34     0034   1  ! ABSTRACT:
   35     0035   1  !
   36     0036   1  !     Start an INSERT operation.
   37     0037   1  !
   38     0038   1  ! ENVIRONMENT:  Runs at any access mode - AST reentrant
   39     0039   1  !
   40     0040   1  ! AUTHOR: Bob Kushlis, CREATION DATE: October 16, 1978
   41     0041   1  !
   42     0042   1  ! MODIFIED BY:
   43     0043   1  !
   44     0044   1  ! 1-001 - Original.  DJS 23-Feb-1981.  This module was created by
   45     0045   1  !         extracting routine EDT$$START_INS  from module EDTWF.
   46     0046   1  ! 1-002 - Regularize headers.  JBS 19-Mar-1981
   47     0047   1  ! 1-003 - Improve the appearance of the listing.  JBS 20-Jun-1983
   48     0048   1  !--
   49     0049   1
```

```
  51     0050   1  %SBTTL 'Declarations'
  52     0051   1  !
  53     0052   1  ! TABLE OF CONTENTS:
  54     0053   1  !
  55     0054   1
  56     0055   1  REQUIRE 'EDTSRC:TRAROUNAM';
  57     0494   1
  58     0495   1  FORWARD ROUTINE
  59     0496   1      EDT$$START_INS : NOVALUE;
  60     0497   1
  61     0498   1  !
  62     0499   1  ! INCLUDE FILES:
  63     0500   1  !
  64     0501   1
  65     0502   1  REQUIRE 'EDTSRC:EDTREQ';
  66     0637   1
  67     0638   1  !
  68     0639   1  ! MACROS:
  69     0640   1  !
  70     0641   1  !     NONE
  71     0642   1  !
  72     0643   1  ! EQUATED SYMBOLS:
  73     0644   1  !
  74     0645   1  !     NONE
  75     0646   1  !
  76     0647   1  ! OWN STORAGE:
  77     0648   1  !
  78     0649   1  !     NONE
  79     0650   1  !
  80     0651   1  ! EXTERNAL REFERENCES:
  81     0652   1  !
  82     0653   1  !     In the routine
```

```
 84   0654  1 %SBTTL 'EDT$$START_INS  - start an INSERT operation'
 85   0655  1
 86   0656  1 GLOBAL ROUTINE EDT$$START_INS                           ! Start an INSERT operation
 87   0657  1    : NOVALUE =
 88   0658  1
 89   0659  1 !++
 90   0660  1 ! FUNCTIONAL DESCRIPTION:
 91   0661  1 !
 92   0662  1 !      This routine is called to start the insertion of text. The new lines
 93   0663  1 !      will be inserted immediately before the current line.  The insert
 94   0664  1 !      count, EDT$$L_WK_INSCNT, is set to zero, and the numbers of the current and
 95   0665  1 !      preceding lines are saved.
 96   0666  1 !
 97   0667  1 ! FORMAL PARAMETERS:
 98   0668  1 !
 99   0669  1 !      NONE
100   0670  1 !
101   0671  1 ! IMPLICIT INPUTS:
102   0672  1 !
103   0673  1 !      EDT$$A_WK_LN
104   0674  1 !      EDT$$L_WK_NXTLNO
105   0675  1 !      EDT$$L_WK_STARTNO
106   0676  1 !      EDT$$L_LNO_ZERO
107   0677  1 !
108   0678  1 ! IMPLICIT OUTPUTS:
109   0679  1 !
110   0680  1 !      EDT$$L_WK_INSCNT
111   0681  1 !
112   0682  1 ! ROUTINE VALUE:
113   0683  1 !
114   0684  1 !      NONE
115   0685  1 !
116   0686  1 ! SIDE EFFECTS:
117   0687  1 !
118   0688  1 !      NONE
119   0689  1 !
120   0690  1 !--
121   0691  1
122   0692  2    BEGIN
123   0693  2
124   0694  2    EXTERNAL ROUTINE
125   0695  2        EDT$$RD_PRVLN,
126   0696  2        EDT$$RD_NXTLN;
127   0697  2
128   0698  2    EXTERNAL
129   0699  2        EDT$$L_WK_INSCNT : LN_BLOCK,            ! The count of inserted lines
130   0700  2        EDT$$A_WK_LN : REF LIN_BLOCK,           ! Pointer to current line
131   0701  2        EDT$$L_WK_NXTLNO : LN_BLOCK,            ! Line number following an insert
132   0702  2        EDT$$L_WK_STARTNO : LN_BLOCK,           ! Line number of line preceding an insert
133   0703  2        EDT$$L_LNO_ZERO : LN_BLOCK;
134   0704  2
135   0705  2 !+
136   0706  2 ! Zero out the insert line counter
137   0707  2 !-
138   0708  2    MOVELINE (EDT$$L_LNO_ZERO, EDT$$L_WK_INSCNT);
139   0709  2 !+
140   0710  2 ! Save the current line number, bucket number, and line address
```

```
; 141        0711  2  !-
; 142        0712  2         MOVELINE (EDT$$A_WK_LN [LIN_NUM], EDT$$L_WK_NXTLNO);
; 143        0713  2  !+
; 144        0714  2  ! Find the previous line number.
; 145        0715  2  !-
; 146        0716  2
; 147        0717  2      IF EDT$$RD_PRVLN ()
; 148        0718  2      THEN
; 149        0719  3          BEGIN
; 150        0720  3          MOVELINE (EDT$$A_WK_LN [LIN_NUM], EDT$$L_WK_STARTNO);
; 151        0721  3          EDT$$RD_NXTLN ()
; 152        0722  3          END
; 153        0723  2      ELSE
; 154        0724  2  !+
; 155        0725  2  ! Make the previous line number 0 if the insert is at the beginning of the buffer.
; 156        0726  2  !-
; 157        0727  3          MOVELINE (EDT$$L_LNO_ZERO, EDT$$L_WK_STARTNO)
; 158        0728  3
; 159        0729  1      END;                                          ! of routine EDT$$START_INS
```

```
                                                                    .TITLE   EDT$WFSTRINS EDT$WFSTRINS - start an INSERT ope
;                                                                                    ration
                                                                    .IDENT   \V04-000\

                                                                    .EXTRN   EDT$$RD_PRVLN, EDT$$RD_NXTLN
                                                                    .EXTRN   EDT$$L_QK_INSCNT
                                                                    .EXTRN   EDT$$A_WK_LN, EDT$$L_WK_NXTLNO
                                                                    .EXTRN   EDT$$L_WK_STARTNO
                                                                    .EXTRN   EDT$$L_LNO_ZERO

                                                                    .PSECT   _EDT$CODE,NOWRT,  SHR,  PIC,2

                                              01FC 00000            .ENTRY   EDT$$START_INS, Save R2,R3,R4,R5,R6,R7,R8   ; 0656
                              58 00000000G 00  9E 00002             MOVAB    EDT$$L_LNO_ZERO, R8
                              57 00000000G 00  9E 00009             MOVAB    EDT$$L_WK_STARTNO, R7
                              56 00000000G 00  9E 00010             MOVAB    EDT$$A_WK_LN, R6
          00000000G 00       68            06  28 00017             MOVC3    #6, EDT$$L_LNO_ZERO, EDT$$L_WK_INSCNT        ; 0708
                              50            66  D0 0001F             MOVL     EDT$$A_WK_LN, R0                            ; 0712
          00000000G 00    01 A0            06  28 00022             MOVC3    #6, 1(R0), EDT$$L_WK_NXTLNO
                   00000000G 00            00  FB 0002B             CALLS    #0, EDT$$RD_PRVLN                           ; 0717
                              10            50  E9 00032             BLBC     R0, 1$
                              50            66  D0 00035             MOVL     EDT$$A_WK_LN, R0                            ; 0720
                   67      01 A0            06  28 00038             MOVC3    #6, 1(R0), EDT$$L_WK_STARTNO
                   00000000G 00            00  FB 0003D             CALLS    #0, EDT$$RD_NXTLN                           ; 0721
                                           04 00044                 RET
                   67            68        06  28 00045 1$:          MOVC3    #6, EDT$$L_LNO_ZERO, EDT$$L_WK_STARTNO      ; 0727
                                           04 00049                 RET                                                 ; 0729
```

; Routine Size: 74 bytes,   Routine Base: _EDT$CODE + 0000

```
; 160        0730  1
; 161        0731  1  !<BLF/PAGE>
```

EDT$WFSTRINS   EDT$WFSTRINS - start an INSERT operation   J 16
                                                                16-Sep-1984 02:15:40   VAX-11 Bliss-32 V4.0-742   Page 5
V04-000   EDT$$START_INS - start an INSERT operation   14-Sep-1984 12:25:45   DISK$VMSMASTER:[EDT.SRC]WFSTRINS.BLI;1   (4)

```
;  163        0732  1 END                                                       ! of module EDT$WFSTRINS
;  164        0733  1
;  165        0734  0 ELUDOM
```

```
;                              PSECT SUMMARY
;
;         Name                       Bytes                        Attributes
;
;  _EDT$CODE                            74  NOVEC,NOWRT, RD , EXE, SHR, LCL, REL, CON, PIC,ALIGN(2)
```

```
;                          Library Statistics
;
;                                    -------- Symbols --------     Pages      Processing
;         File                       Total   Loaded   Percent      Mapped     Time
;
;  _$255$DUA28:[EDT.SRC]EDT.L32;1       377      14         3         40       00:00.2
;  _$255$DUA28:[EDT.SRC]PSECTS.L32;1      2       1        50          7       00:00.1
```

```
;                          COMMAND QUALIFIERS
;
;      BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/NOTRACEBACK/LIS=LIS$:WFSTRINS/OBJ=OBJ$:WFSTRINS MSRC$:WFSTRINS.BLI/UPDATE=(ENH$:WFST
;      RINS)
;
; Size:         74 code + 0 data bytes
; Run Time:        00:10.2
; Elapsed Time:    00:12.4
; Lines/CPU Min:     4330
; Lexemes/CPU-Min: 12483
; Memory Used:  64 pages
; Compilation Complete
```

VMSMSG
LIS

WFCOPLIN
LIS

USSTRING
LIS

WFSCOPY
LIS

WFDELLIN
LIS

WFGETBKT
LIS

WFOPNBUF
LIS

WFREABCK
LIS

WFREAFWD
LIS

WFSTRINS
LIS

WFAPPBKT
LIS

WFENDWS
LIS

WFRESSEQ
LIS

UGBUFFER
LIS

WFCLEAR
LIS

USSUBS
LIS

WFDELBKT
LIS

WFSPLBKT
LIS

WFLOCLIN
LIS

WFRBUKT
LIS

WFTOP
LIS

WFINSLIN
LIS

WFREACUR
LIS

WFREAINP
LIS

WFREPLIN
LIS

WFBOTTOM
LIS

WFECOPY
LIS